

BFS Winter 2025 | March 10, 2025

STEM X Business



Sign in and
keep an eye
out for the
password!

Future Workshop Requests



TABLE OF CONTENTS

01.

Why?

Why pick up STEM skills an Econ Major?

02.

What?

What careers are available?

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Skills

Technical Skills needed for a STEM career

Similarities in STEM and Business



Data Analysis and Decision Making

- Data is used in decision making
- Important to have basic understanding of how to read data

Project Mgmt & Collaboration

- Group work is used in all jobs
- Very common interview question

Knowing more only makes you more cracked 🤩

Advantages of a STEM

“Mindset”

- Analytical
- Strength in research
- Critical thinking
- Logical
- Technical skills

Applies to ALL majors!

Advantages of a Business

“Mindset”

- NETWORKING
- Interpersonal skills
- Looking at the big picture (management)
- “Soft” skills

BUSINESS MAJORS IN STEM

Advantages: Make key decisions that help companies grow, less competition, easier to stand out, good job security, cross-disciplinary learning, less demanding hours (usually), new career paths

Opportunities: product manager, auditor, controller, CFO, sales, marketing, supply chain, human resources

The Pitch: But why do “business” when you’re a STEM kid?

You’re needed!

- High Demand for Interdisciplinary Skill Sets
- Career Flexibility (Leadership Roles)
- Engineering & Innovation
- Cybersecurity / Info Tech
- Financial modelling / AI incorporation in business





Bank of America

Investment Banking

Desired:

- 3.2 minimum GPA preferred
 - Technical skills such as Excel and PowerPoint
 - Major or minor of studies in a field of Quantitative Finance, Financial Engineering, or a related technical field that blends advanced quantitative methods with finance and economics is a plus
 - Experience managing and analyzing large data sets using data science tools such as artificial intelligence and machine learning
 - Knowledge of coding and programming skills, including but not limited to Bloomberg, FactSet, Python, R, or equivalent
-

Good Majors/Minors to incorporate

Majors: Math/Econ, Statistics & Data Science,
Data Theory, anything Mathy, Financial
Actuarial Mathematics, Computer Science

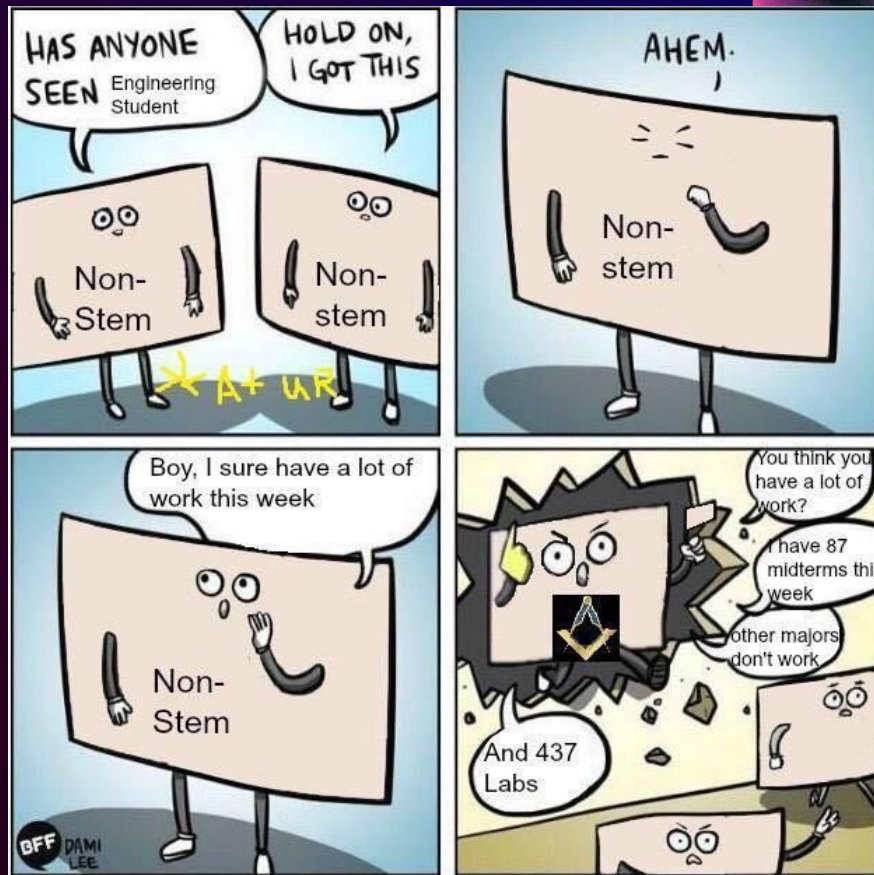
Minors: Stats, BioStats, Social Data Science,
Data Science Engineering, anything Mathy

MFEs, MBAs... and MSBAs?

Some of your options:

- Master in Business Administration
(with focus!)**
- Master in Financial Engineering**
- Master of Science in Business
Analytics**

Password: STEM



Examples of Jobs with Technical Skills

Financial Analyst

Evaluates financial data to help companies make investment decisions

Investment Banking

Advises companies on raising capital, M&A, and other transactions

Financial Engineering

Uses mathematical models to develop complex financial products and algorithms

Hedge Funds

Manages investments using various strategies to maximize returns

Quant

Develop trading strategies and assess financial risk

FinTech

Applies technology to improve financial services

Example field: Quant

- Algorithmic trading, complex financial models
- Front office and Back office quants
 - Front office: build pricing and trading tools
 - Back office: validate models, research, risk management
- Important STEM Skills: Matlab, C++, Java
- Wanted Majors: Computer Science, Data Science, Statistics, Math, etc.

Data Analytics and Business

Business firms hire STEM majors like Data Science and Statistics:

- Gain insights into markets (Consumer Data and Digital Footprint)
- Decisions on data trends
- Efficiency and risk
- Consumer taste and preferences

Marketing, Consulting, Sales, etc

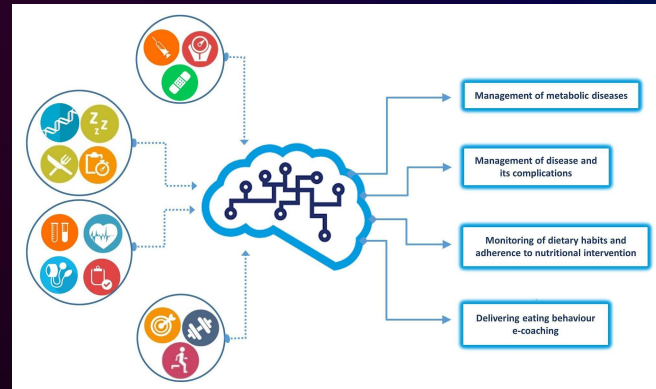
Careers such as the ones listed above typically require a lot of product knowledge. While it's not necessarily a technical skill, those looking into those roles should be highly knowledgeable in these fields (ex: healthcare and tech consulting)

AI in business

- AI and ML
- Efficiency and Algorithmic trading
- Image recognition and visual data

How businesses are using AI

Source: McKinsey & Company Survey, 2023 | Chart: 2024 AI Index report



IMPORTANT TECHNICAL SKILLS

Anyone in Finance

Excel (MUST KNOW),
Tableau is nice to know

Coding

Python, R, SQL, Java, C++,
MatLab

Specific Libraries

Pandas, NumPy, SciPy,
QuantLib

WAYS TO DEVELOP TECHNICAL SKILLS AND WORK ON PROJECTS

On Campus
Clubs

Kaggle

Research Labs

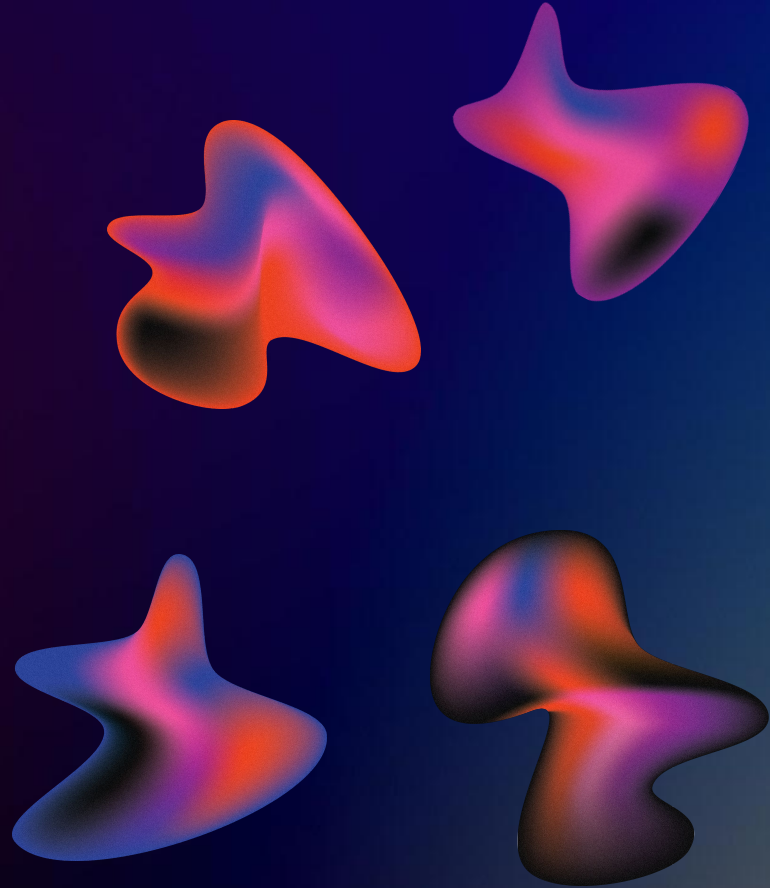
YouTube

WILL AI TAKE YOUR JOB?

AI is widely used in finance for fraud detection, risk assessment, and algorithmic trading

There are many AI softwares that are used, and it is important that you know how to use them

AI itself will not take your job, but if you don't know how to properly use AI softwares, someone who knows how to use it may take your job



Speaking of AI...

A little bit to think about and discuss.

Deepseek?

Open source innovation - allows for developers worldwide to access, modify, build upon its models

It's impact?

- On firms
- On financial markets

Want to explore more?

Harvard Business Review


TLDR

Morning Brew

Short Squeez

Perplexity





**See you next
quarter!**

Dining hall run
afterwards!

OUR SERVICES

Service One

Elaborate on what you want to discuss.

Service Three

Elaborate on what you want to discuss.

Service Two

Elaborate on what you want to discuss.

Service Four

Elaborate on what you want to discuss.





03.

STATS & NUMBERS

Elaborate on what you want to discuss.



2 OUT OF 5

Elaborate on the
featured statistic.



37%

Elaborate on the
featured statistic.



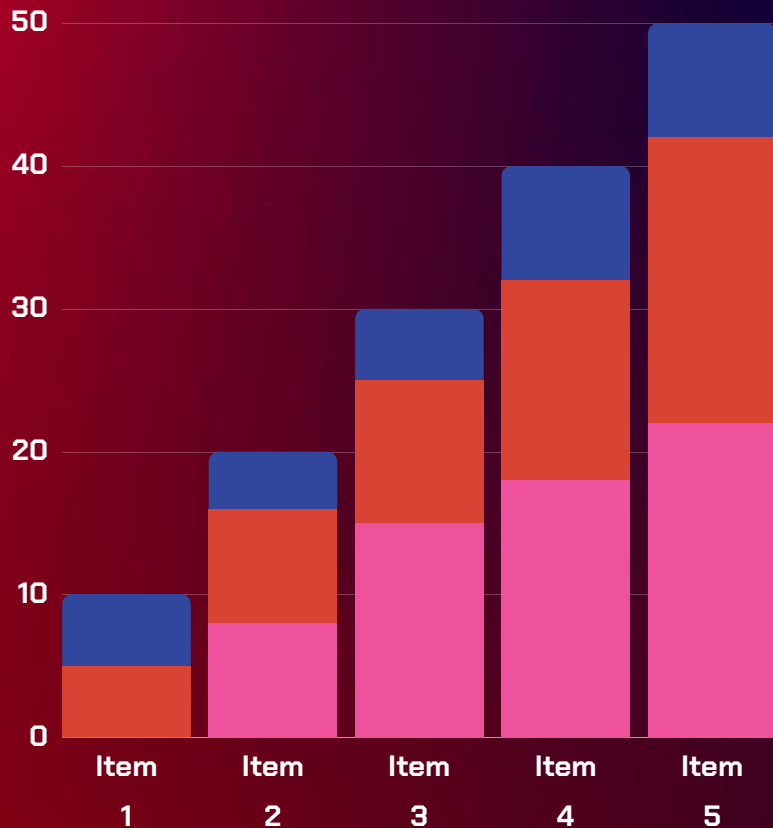
95%

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12 MILLION

Elaborate on the
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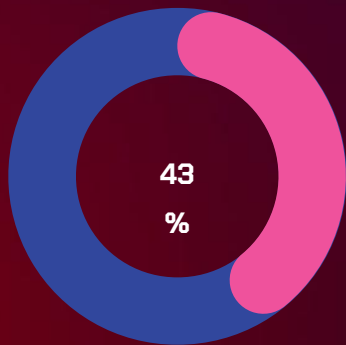


WRITE YOUR TOPIC OR IDEA

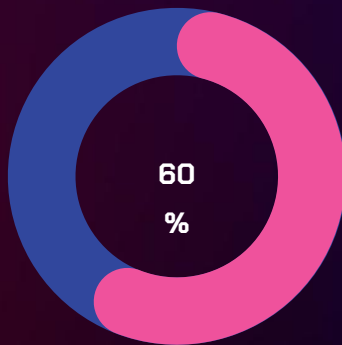
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INFOGRAPHIC SLIDE REPORT

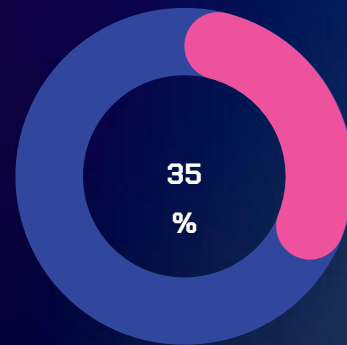
Elaborate on the featured statistic



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Elaborate on the featured statistic.